Title (en)

PRODUCTION OF PHTHALIC ANHYDRIDE BY GAS PHASE OXIDATION OF o-XYLOL IN A PRIMARY AND A SECONDARY REACTOR

Title (de)

HERSTELLUNG VON PHTHALSÄUREANHYDRID DURCH GASPHASENOXIDATION VON O-XYLOL IN EINEM HAUPT- UND NACHREAKTOR

Title (fr)

PRODUCTION D'ANHYDRIDE PHTALIQUE PAR OXYDATION EN PHASE GAZEUSE D'O-XYLOL DANS UN RÉACTEUR PRINCIPAL ET UN RÉACTEUR SECONDAIRE

Publication

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Application

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Abstract (en)

[origin: WO2007135102A2] The invention relates to a method for producing phthalic anhydride by catalytic gas phase oxidation of o-xylol. According to said method, a gaseous mixture of o-xylol and an oxygen-containing gas is reacted in a primary reactor to give a gaseous intermediate reaction product which contains unreacted o-xylol, phthalic anhydride reaction products with a lower oxidation state and phthalic anhydride, the reaction heat produced in the primary reactor being at least partially carried off by indirect cooling with a heat exchange medium, and introducing the intermediate reaction product to a secondary reactor. The concentration of the unreacted o-xylol in the intermediate reaction product is at least 1% by weight, and the sum of the concentrations of phthalic anhydride of the lower oxidation state in the intermediate reaction product is at least 0.5% by weight. The method according to the invention allows an increase in total yield of phthalic anhydride without any or without substantial decrease in product quality.

IPC 8 full level

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CPC (source: EP KR US)

C07C 51/265 (2013.01 - EP US); **C07D 307/89** (2013.01 - EP KR US)

Cited by

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